

PCT/FR99/02941 -

	124	127	126	125
Humanin	N I L L S H L L A R I W K K P Y K K R E T - - P D C F W K Y C V			
Grenouille	I S L L S R L Q S K D R K Q F K K R A G N L S E C F W K Y C V			
Carpe α	R L I P P S G L W G S R R R Q F R K R G G - G A D C F W K Y C V			
Carpe γ	R L I P P R G L W G S R R R Q F R K R G G - G A D C F W K Y C I			

FIGURE 1

2/8

CCAAGAAGGAAGCCGTCTATCTTGTGGCGATC

ATG TAT AAG CTG GCC TCC TGC TGT TTG CTT TTC ATA GGA TTC TTA
Met Tyr Lys Leu Ala Ser Cys Cys Leu Leu Phe Ile Gly Phe Leu

PEPTIDE SIGNAL

AAT CCT CTC TTA TCT CTT CCT CTC CTT GAC TCC AGG GAA ATA TCC
Asn Pro Leu Leu Ser Leu Pro Leu Leu Asp Ser Arg Glu Ile Ser

TTT CAA CTC TCA GCA CCT CAT GAA GAC GCG CGC TTA ACT CCG GAG
Phe Gln Leu Ser Ala Pro His Glu Asp Ala Arg Leu Thr Pro Glu

PRO-SEGMENT

GAG CTA GAA AGA GCT TCC CTT CTA CAG ATA CTG CCA GAG ATG CTG
Glu Leu Glu Arg Ala Ser Leu Leu Gln Ile Leu Pro Glu Met Leu

GGT GCA GAA AGA GGG GAT ATT CTC AGG AAA GCA GAC TCA AGT ACC
Gly Ala Glu Arg Gly Asp Ile Leu Arg Lys Ala Asp Ser Ser Thr

AAC ATT TTT AAC CCA AGA GGA AAT TTG AGA AAG TTT CAG GAT TTC
Asn Ile Phe Asn Pro Arg Gly Asn Leu Arg Lys Phe Gln Asp Phe

TCT GGA CAA GAT CCT AAC ATT TTA CTG AGT CAT CTT TTG GCC AGA
Ser Gly Gln Asp Pro Asn Ile Leu Leu Ser His Leu Leu Ala Arg

ATC TGG AAA CCA TAC AAG AAA CGT GAG ACT CCT GAT TGC TTC TGG
Ile Trp Lys Pro Tyr Lys Lys Arg Glu Thr Pro Asp Cys Phe Trp

UROTENSINE II

AAA TAC TGT GTC TGA
Lys Tyr Cys Val ***

AGTGAAATAAGCATCTGTTAGTCAGCTCAGAAACACCCATCTTAGAATATGAAAAATAACACA
ATGCTTGATTTGAAAACAGTGTGGAGAAAACTAGGCAAACCTACACCCTGTTTCATTGTTACCT
GGAAAATAAATCCTCTAT

FIGURE 2

3/8

5' CGG AGC AGA CAC CCA GCC AGA CTT CTT CCC GTC GTC ATG GAC AGG GTG CCC TTC
Met Asp Arg Val Pro Phe
←.....

TGC TGC CTG CTC TTC GTA GGA CTC CTG AAT CCA CTC CTG TCT TTT CCC GTC ACG
Cys Cys Leu Leu Phe Val Gly Leu Leu Asn Pro Leu Leu Ser Phe Pro Val Thr
.....

peptide signal

GAC ACT GGT GAA ATG TCT CTT CAG CTT CCA GTG CTT GAG GAA AAT GCT CTT CGG
Asp Thr Gly Glu Met Ser Leu Gln Leu Pro Val Leu Glu Glu Asn Ala Leu Arg
.....

GCT CTG GAG GAG CTG GAG AGG ACT GCC CTC CTG CAG ACG CTG CGC CAG ACC GTG
Ala Leu Glu Glu Leu Glu Arg Thr Ala Leu Leu Gln Thr Leu Arg Gln Thr Val
.....

pro-segment

GGC ACA GAA GCA GAG GGA AGC CTT GGC CAG GCA GAT CCC AGT GCC GAG ACT CCC
Gly Thr Glu Ala Glu Gly Ser Leu Gly Gln Ala Asp Pro Ser Ala Glu Thr Pro
.....

ACT CCA AGG GGA AGC TTG AGG AAG GCT CTC ACT GGG CAA GAT TCT AAC ACT GTA
Thr Pro Arg Gly Ser Leu Arg Lys Ala Leu Thr Gly Gln Asp Ser Asn Thr Val
.....

CTG AGC CGT CTT TTG GCG AGA ACC AGG AAA CAA CGT AAG CAA CAC GGG ACT GCC
Leu Ser Arg Leu Leu Ala Arg Thr Arg Lys Gln Arg Lys Gln His Gly Thr Ala
.....

CCA GAA TGC TTC TGG AAG TAC TGC ATT TCA AGA GAG ACG TCT CCT CAG AAC CAT
Pro Glu Cys Phe Trp Lys Tyr Cys Ile ***
.....

UrotensineII

CAC TTC AGG AAA CTA AAG AGC ACA TGC TTG AAG AAA AAT CGT GCC AAC AAC GCC
.....

CCG TTC TCC ACT ATG AGA AAT AAA CCC TCT ATG TTT CTC AAC T 3'

FIGURE 3

		63			72			81			90			99			108
TGC	TGC	CTG	CTC	TTC	ATA	GGA	CTT	CTG	AAT	CCA	CTG	CTG	TCC	CTT	CCC	GTC	ACG
Cys	Cys	Leu	Leu	Phe	Ile	Gly	Leu	Leu	Asn	Pro	Leu	Leu	Ser	Leu	Pro	Val	Thr

peptide signal

		117			126			135			144			153			162
GAC	ACT	GGT	GAG	AGG	ACT	CTT	CAG	CTT	CCA	GTG	CTT	GAG	GAA	GAC	GCT	CTT	CGG
Asp	Thr	Gly	Glu	Arg	Thr	Leu	Gln	Leu	Pro	Val	Leu	Glu	Glu	Asp	Ala	Leu	Arg

		171			180			189			198			207			216
GCT	CTG	GAG	GAG	CTG	GAG	AGG	ATG	GCC	CTC	CTG	CAG	ACC	CTG	CGT	CAG	ACC	ATG
Ala	Leu	Glu	Glu	Leu	Glu	Arg	Met	Ala	Leu	Leu	Gln	Thr	Leu	Arg	Gln	Thr	Met

pro-segment

		225			234			243			252			261			270
GGC	ACG	GAA	GCA	GGG	GAG	AGC	CCT	GGA	GAA	GCA	GGT	CCC	AGC	ACT	GAG	ACT	CCC
Gly	Thr	Glu	Ala	Gly	Glu	Ser	Pro	Gly	Glu	Ala	Gly	Pro	Ser	Thr	Glu	Thr	Pro

		279			288			297			306			315			324
ACT	CCA	CGG	GGA	AGC	ATG	AGG	AAG	GCT	TTC	GCT	GGG	CAA	AAT	TCT	AAC	ACT	GTA
Thr	Pro	Arg	Gly	Ser	Met	Arg	Lys	Ala	Phe	Ala	Gly	Gln	Asn	Ser	Asn	Thr	Val

		333			342			351			360			369			378
CTG	AGT	CGT	CTC	TTG	GCA	AGA	ACC	AGG	AAA	CAA	CAT	AAG	CAA	CAC	GGG	GCT	GCC
Leu	Ser	Arg	Leu	Leu	Ala	Arg	Thr	Arg	Lys	Gln	His	Lys	Gln	His	Gly	Ala	Ala

		387			396			405			414			423			432
CCA	GAG	TGC	TTC	TGG	AAA	TAC	TGC	ATT	TGA	GGA	GAC	ACA	AGC	GCC	CGT	TGG	TCT
Pro	Glu	Cys	Phe	Trp	Lys	Tyr	Cys	Ile	***								

Urotensine II

CTC AGA ACC ATT ACA TTC AGG AAA CGG GCA GAG CAG ATG CTT GAA GCA AAA TCA

CGC TAA CGA CGC CTT GTT CTT CAT TAT GAG AAA TAA ATC CTC TAT GTT TCT CA 3'

FIGURE 4

5/8

A

1 2 3 4 5 6 7 8

A

B

C

D

E

F

G

H

	1	2	3	4	5	6	7	8
A	cerveau entier	amygdale	noyau caudé	cervelet	cortex cérébral	lobe frontal	hippocampe	<i>medulla oblongata</i>
B	lobe occipital	putamen	<i>locus niger</i>	lobe temporal	thalamus	noyau sous-thalamique	moelle épinière	-
C	cœur	aorte	muscle squelettique	colon	vessie	utérus	prostate	estomac
D	testicules	ovaires	pancréas	hypophyse	glande surrénale	thyroïde	glande salivaire	glande mammaire
E	rein	foie	intestin grêle	rate	thymus	leucocyte périphérique	ganglion lymphatique	moelle osseuse
F	appendice	poumon	trachée	placenta	-	-	-	-
G	cerveau foetal	cœur foetal	rein foetal	foie foetal	rate foetale	thymus foetal	poumon foetal	-
H	ARN total de levure 100 ng	ARNt de levure 100 ng	ARNr d' <i>E. coli</i> 100 ng	ADN d' <i>E. coli</i> 100 ng	poly r(A) 100 ng	ADN C ₆ I humain	ADN humain 100 ng	ADN humain 500 ng

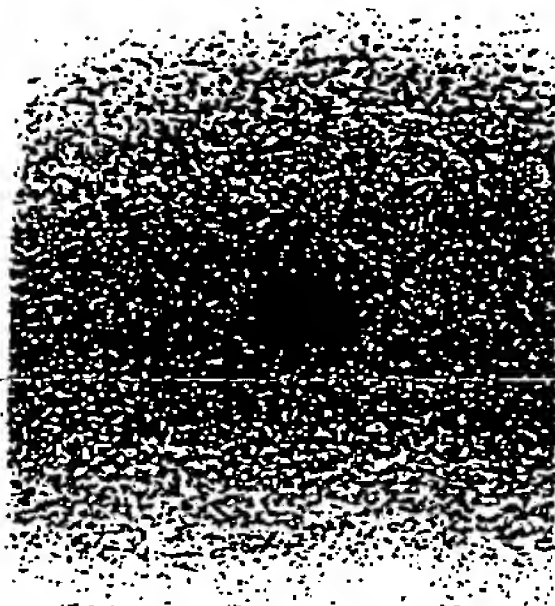
FIGURE 5.1

6/8

B

moelle
épineière

725 pb →



C



(1)



(2)

FIGURE 5.2

108199-40913860

WO 00/31265

7/8

Humain	E	A	A	G	G	G	G	G	G	G	A	-	-	N	N	N
Grenouille	-	G	G	G	S	S	G	G	S	G	G	G	G	N	N	N
Goujon	T	N	-	N	G	N	G	N	N	G	-	S	S	F	F	F
Truite	P	L	A	S	A	T	A	T	T	A	T	T	T	-	-	-
Poisson ventouse A	-	S	-	-	-	-	-	-	-	-	-	S	S	S	S	S
Poisson ventouse B	D	E	-	E	-	E	-	E	E	-	E	E	E	-	-	-
Carpe α	C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carpe β1	Y	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carpe β2	K	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Carpe γ	W	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Flet	F	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Esturgeon	C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Poisson spatule	V	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Raie	C	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Roussette	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Lamproie	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

FIGURE 6

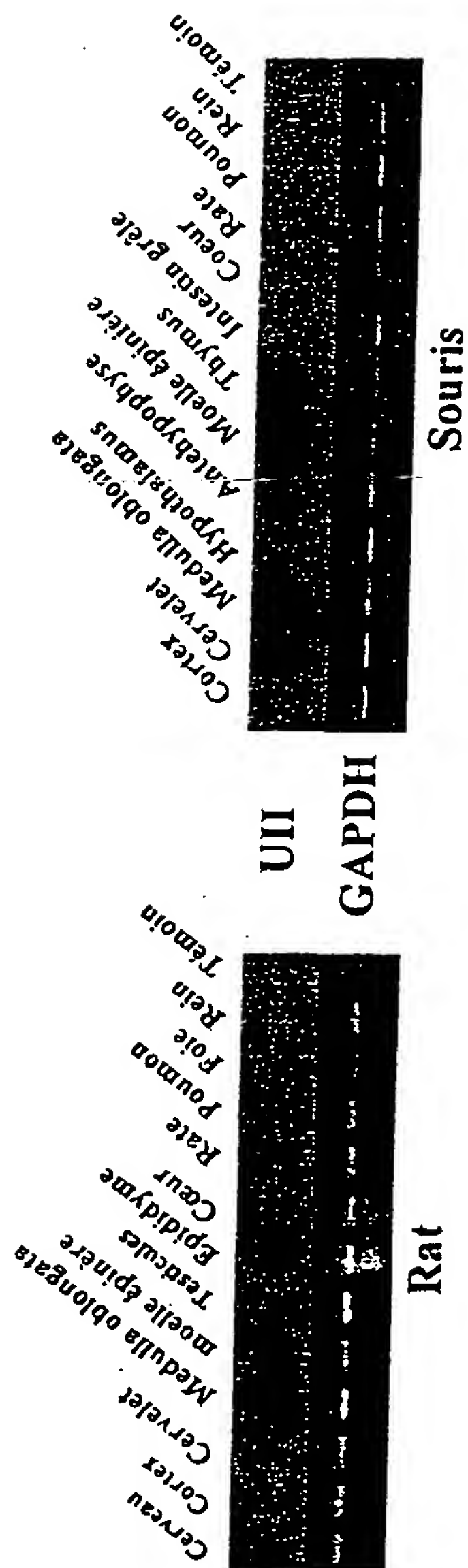


FIGURE 7

10 1987年，在“六四”事件后，中国开始实施“六五计划”，这是中国历史上第一个五年计划。该计划旨在通过大规模的基础设施建设和工业化，推动国家的现代化进程。在这一过程中，中国政府采取了一系列措施，包括引进外资、加强技术合作等，以促进经济的快速发展。